

REMARKS

The Official Action dated April 28, 2009 has been carefully considered. Accordingly, the changes presented herein, taken with the following remarks, are believed sufficient to place the present application in condition for allowance. Reconsideration is respectfully requested.

Rejection Under 35 USC 103(a) based on Schwartz, Kato, Bajikar and Matsuzaki.

The Examiner rejected claims 17, 18, 22-27, 29, 30, 31 and 35 under 35 USC 103(a) as being unpatentable over Schwartz et al. (US 20010044896) in view of Kato (US 20020184385) in further view of Bajikar (US 20050133582) and Matsuzaki (WO 2004/023275). The rejection is traversed.

Claims 17, 18, 22-27, 29, and 30.

With regard to claim 17, the Examiner does not cite a single piece of prior art that discloses more than one of the steps of claim 17. Instead, the Examiner cites a separate piece of prior art for each of the four steps, and asserts that a person of ordinary skill in the art would have recognized the desirability and advantage of modifying Schwartz by employing the well-known features disclosed in Kato, Bajikar and Matsuzaki, for which digital signature generation will be enhanced.

First, the Examiner has failed to make a *prima facie* case of obviousness under Section 103(a). The rejection contains no statement that supports a motivation to combine these four pieces of prior art to develop the applicant's claimed invention, other than the conclusory assertion that one of ordinary skill in the art would have recognized the desirability and advantage of the combination. Conclusory statements of generalized advantages are inadequate to support a finding of motivation. *See, e.g., In re Beasley*, 2004 WL 2793170 (Fed. Cir. Dec. 7, 2004) (slip op. at 10). The Examiner must present a

“convincing line of reasoning” as to why the combination of teachings is proper. MPEP 2142. There is no such line of reasoning in the rejection, and a *prima facie* case has not been made.

Second, Kato does not disclose collecting data related to software and hardware configurations from a device through a software agent. Paragraph 0158 of Kato discloses a distributor (ref. 103) that determines what kind of operating system resides on a given portable computing device for the purpose of selecting a client appropriate for the operating system. Kato does not disclose the collection of hardware data from a device, nor does it disclose collecting data through a software agent. The distributor described in Kato is not a software agent.

Third, Matsuzaki does not disclose determining whether the device has been excluded from accessing or enrolling in the service. Matsuzaki discloses a system for the registration of multiple devices within a particular group, and describes limiting the number of devices enrolled (see Abstract; Specification at p. 42, line 2 through p. 43, line 24; Fig. 9), but not whether the device has been excluded from accessing or enrolling in the service. In Matsuzaki, registration fails if the total number of devices enrolled exceeds a set figure, not if that particular device has been excluded from accessing or enrolling in the service.

Reconsideration of the rejection of claim 17 is requested. As the rejection of independent claim 17 is traversed, the rejection of dependent claims 18, 22-27, 29 and 30 likewise has been traversed. Reconsideration is respectfully requested.

With specific regard to claim 23, Schwartz does not teach the authentication server determining whether the device has been excluded from accessing or enrolling the service by determining whether the device is on a list or in a group of devices not allowed to access the service. Paragraph 88 of Schwartz discloses a server determining whether a device signature conforms to a device key stored in a database. The present invention goes further, however,

and includes the step of verifying that the device is not on a list or in a group of devices not allowed to access the service. Reconsideration is respectfully requested.

With specific regard to claims 24 and 25, Matsuzaki describes limiting the number of devices enrolled (see Abstract: "...when the number of registered member devices is less than the maximum number of registerable member devices, to output the common secret information to the new member device."), not the number of enrollments a particular device is allowed. In addition, Applicant finds no teaching or suggestion in Matsuzaki of limiting the maximum number of enrollments for a particular device to zero. Limiting the number of devices enrolled, as described in Matsuzaki, does not teach limiting the number of enrollments a particular device is allowed. Reconsideration is respectfully requested.

With specific regard to claims 29 and 30, Applicant finds no teaching or suggestion in Matsuzaki of a registration hierarchy for a single user with multiple devices, or for unregistering a device only through the device itself, or another device within the registration hierarchy registered earlier than the device to be unregistered. Matsuzaki discloses a system for the registration of multiple devices within a particular group (see Abstract), not for creation of a registration hierarchy for a single user with multiple devices. Matsuzaki discusses the determination of whether a playback apparatus is unregistered (see p. 19, lines 10-25), but does not disclose the step of *unregistering a device only through the device itself, or another device within the registration hierarchy registered earlier than the device to be unregistered*. In fact, p. 19, lines 10-25 of Matsuzaki do not discuss *unregistering* a device at all (i.e., unregistering a device that had previously been registered), only a registration failure (i.e., declining a registration request). Reconsideration is respectfully requested.

Claim 31.

With regard to independent claim 31, the Examiner cites the same four pieces of prior art as for claim 17. As with claim 17, the Examiner asserted only that a person of ordinary

skill in the art would have recognized the desirability and advantage of modifying Schwartz by employing the well-known features disclosed in Kato, Bajikar and Matsuzaki, for which access control will be enhanced.

First, the Examiner has failed to make a *prima facie* case of obviousness under Section 103(a). The rejection contains no statement that supports a motivation to combine these four pieces of prior art to develop the applicant's claimed invention, other than the conclusory assertion that one of ordinary skill in the art would have recognized the desirability and advantage of the combination. Conclusory statements of generalized advantages are inadequate to support a finding of motivation. *See, e.g., In re Beasley*, 2004 WL 2793170 (Fed. Cir. Dec. 7, 2004) (slip op. at 10). The Examiner must present a "convincing line of reasoning" as to why the combination of teachings is proper. MPEP 2142. There is no such line of reasoning in the rejection, and a *prima facie* case has not been made.

Second, Schwartz does not teach verifying that the device is not on a list or in a group of devices not allowed to access the service, or is not a device with a maximum number of enrollments set to zero. Applicant finds no teaching in Paragraphs 0090 or 0094 of Schwartz of this step. Paragraph 0090 discusses mutating the device signature and updating the device key. Paragraph 0094 discusses the consequences of when there is a lack of agreement between the device configuration parameter fingerprint and the device information record; the control policy referred to in this paragraph is a determination of whether the disagreement between the two exceeds a critical threshold. There is no mention or discussion of verifying that the device is not on a list or in a group of devices not allowed to access the service, or is not a device with a maximum number of enrollments set to zero. Likewise, Paragraph 0100 does not teach verifying that the device is not a device with a maximum number of enrollments set to zero. In contrast, the critical threshold of Schwartz is a number used to

evaluate the difference between the device configuration parameter fingerprint and the device information record. There is no suggestion or discussion of setting the maximum number of enrollments to zero for the device.

Third, Kato does not disclose collecting data related to software and hardware configurations from a device through a software agent. Paragraph 0158 of Kato discloses a distributor (ref. 103) that determines what kind of operating system resides on a given portable computing device for the purpose of selecting a client appropriate for the operating system. Kato does not disclose the collection of hardware data from a device, nor does it disclose collecting data through a software agent. The distributor described in Kato is not a software agent.

Fourth, Matsuzaki does not disclose determining whether the device has been excluded from accessing or enrolling in the service. Matsuzaki discloses a system for the registration of multiple devices within a particular group, and describes limiting the number of devices enrolled (see Abstract; Specification at p. 42, line 2 through p. 43, line 24; Fig. 9), but not whether the device has been excluded from accessing or enrolling in the service. In Matsuzaki, registration fails if the total number of devices enrolled exceeds a set figure, not if that particular device has been excluded from accessing or enrolling in the service.

Accordingly, reconsideration of the rejection of claim 31 is requested.

Claim 35.

With regard to independent claim 35, the Examiner cites the same four pieces of prior art as for claims 17 and 31. As with those claims, the Examiner asserted only that a person of ordinary skill in the art would have recognized the desirability and advantage of modifying Schwartz by employing the well-known features disclosed in Kato, Bajikar and Matsuzaki, for which digital signature generation will be enhanced.

First, as above, the Examiner has failed to make a prima facie case of obviousness under Section 103(a). The rejection contains no statement that supports a motivation to combine these four pieces of prior art to develop the applicant's claimed invention, other than the conclusory assertion that one of ordinary skill in the art would have recognized the desirability and advantage of the combination. Conclusory statements of generalized advantages are inadequate to support a finding of motivation. *See, e.g., In re Beasley*, 2004 WL 2793170 (Fed. Cir. Dec. 7, 2004) (slip op. at 10). The Examiner must present a "convincing line of reasoning" as to why the combination of teachings is proper. MPEP 2142. There is no such line of reasoning in the rejection, and a prima facie case has not been made.

Second, Kato does not disclose collecting data related to software and hardware configurations from a device through a software agent. Paragraph 0158 of Kato discloses a distributor (ref. 103) that determines what kind of operating system resides on a given portable computing device for the purpose of selecting a client appropriate for the operating system. Kato does not disclose the collection of hardware data from a device, nor does it disclose collecting data through a software agent. The distributor described in Kato is not a software agent.

Third, Matsuzaki does not disclose determining whether the device has been excluded from accessing or enrolling in the service. Matsuzaki discloses a system for the registration of multiple devices within a particular group, and describes limiting the number of devices enrolled (see Abstract; Specification at p. 42, line 2 through p. 43, line 24; Fig. 9), but not whether the device has been excluded from accessing or enrolling in the service. In Matsuzaki, registration fails if the total number of devices enrolled exceeds a set figure, not if that particular device has been excluded from accessing or enrolling in the service.

Accordingly, reconsideration of the rejection of claim 35 is requested.

Rejection Under 35 USC 103(a) based on Schwartz, Kato, Bajikar, Matsuzaki and Cui.

The Examiner rejected claims 19-21 under 35 USC 103(a) as being unpatentable over the combination of Schwartz, Kato, Bajikar, and Matsuzaki, as applied to claim 17, and further in view of Cui et al (US 20050166053). The rejection is traversed.

First, the rejection of claim 17 has been traversed, thus dependent claims 19-21 are allowable as they stand.

Second, with specific regard to claim 20, Cui does not teach wherein the hashes used to generate the digital signature are changed with every attempt to access a service, and the hashes cannot be reversed. Paragraph 0063 merely states that a variety of hash functions may be employed to generate the tier device signature. And paragraph 0070 discusses updating the device signature after a pre-determined period of time, not changing the hashes with every attempt to access a service.

Third, with specific regard to claim 21, Cui does not teach wherein the digital signature is one of several stages of a framework of authorization and authentication processes governing access to the service by the device. Figure 3 of Cui is a flow diagram showing the process of determining at least one device signature for a mobile device, with different trust levels established for the device. It does not show several stages of a framework of authorization and authentication processes as claimed.

Accordingly, the rejection of claims 19-21 has been traversed. Reconsideration is respectfully requested.

Rejection Under 35 USC 103(a) based on Schwartz, Kato, Bajikar, Matsuzaki and Wade.

The Examiner rejected claim 28 under 35 USC 103(a) as being unpatentable over the combination of Schwartz, Kato, Bajikar, and Matsuzaki, as applied to claim 17, and further in

view of Wade et al (US 5,552,776). The rejection is traversed. As discussed above, the rejection of claim 17 has been traversed, thus dependent claim 28 is allowable as it stands. Reconsideration is respectfully requested.

Rejection Under 35 USC 103(a) based on Schwartz, Kato, Bajikar, Matsuzaki and Blumenau,

The Examiner rejected claims 32-34 under 35 USC 103(a) as being unpatentable over the combination of Schwartz, Kato, Bajikar, and Matsuzaki, as applied to claim 17, and further in view of Blumenau et al (US 20020083339). The rejection is traversed. As discussed above, the rejection of claim 31 has been traversed, thus dependent claims 32-34 are allowable as they stand. Reconsideration is respectfully requested.

Further, with regard to claims 33 and 34, Kato does not disclose collecting data related to software and hardware configurations from a device through a software agent. Paragraph 0158 of Kato discloses a distributor (ref. 103) that determines what kind of operating system resides on a given portable computing device for the purpose of selecting a client appropriate for the operating system. Kato does not disclose the collection of hardware data from a device, nor does it disclose collecting data through a software agent. The distributor described in Kato is not a software agent.

In addition, with regard to claim 34, Matsuzaki does not disclose determining whether the device has been excluded from accessing or enrolling in the service. Matsuzaki discloses a system for the registration of multiple devices within a particular group, and describes limiting the number of devices enrolled (see Abstract; Specification at p. 42, line 2 through p. 43, line 24; Fig. 9), but not whether the device has been excluded from accessing or enrolling in the service. In Matsuzaki, registration fails if the total number of devices enrolled exceeds a set figure, not if that particular device has been excluded from accessing or enrolling in the service. Reconsideration is respectfully requested.

Accordingly, the rejections of Claims 17-35 have been traversed. It is believed that the above represents a complete response to the rejections under 35 U.S.C. 103(a), and places the present application in condition for allowance. Reconsideration and an early allowance are requested.

Respectfully submitted,

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